

REMARKS

1. In response to the Office Action mailed November 15, 2004, Applicants respectfully request reconsideration. Claims 1-24 were originally presented for examination. In the outstanding Office Action, claims 1-8, 13, 16 and 18-24 were rejected and claims 9-12, 14, 15 and 17 were objected to. Claims 1-2, 4, 5, 7-12, 14-15, 18, and 20-23 have been amended. Claims 25-31 have been added in this paper. No claims have been canceled. Thus, upon entry of this paper, thirty-one (31) claims will remain pending in this application. Of these, four (4) claims (claim 1, 22, 24 and 31) are independent. These Amendments are not made in response to any rejection and are not intended to narrow the scope of the claims in any way. Rather, the foregoing Amendments are intended to clarify the claims and/or make explicit that which is implicit in the claims.
2. Based on the above Amendments and following Remarks, Applicants respectfully request that the outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

3. Applicants acknowledge receipt of form PTO-892 identifying additional references made of record by the Examiner.
4. Applicants acknowledge receipt of the form PTO-1449 filed by Applicants on June 26, 2003, which has been initialed by the Examiner indicating consideration of the references cited therein.

Allowable Subject Matter

5. Applicants note with appreciation the Examiner's indication that claims 9-12, 14-15 and 17 would be in condition for allowance if rewritten in independent form including all of the limitations of their respective base claim and any intervening claims. Applicants have added new claim 32 which incorporates the general subject matter of claims 1 and 17. As such, Applicants respectfully submit that new claim 32 is in condition for allowance.

Claim Objections

6. The Examiner has objected to claims 7, 18, 20, 21 and 23 due to various informalities. Claims 7, 18, 20, 21 and 23 have been amended to accommodate these objections. Withdrawal is respectfully requested.

Amendments to the Title

7. Applicants have amended the title to shorten the title by deleting the language "Methods and System For." As amended, the title recites "Masking Faults in a Margin Testing Environment." Entry is respectfully requested.

Amendments to the Specification

8. Applicants have amended paragraph 1 of the application to insert the U.S. Application Serial Numbers of the related references identified therein. No new matter has been added. Entry is respectfully requested.

Claim Rejections

9. Claims 1-4, 6-8, 13, 16 and 22 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2003/0101020 A1 to Matsushige (hereinafter, "Matsushige"). Claim 24 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushige in view of U.S. Patent No. 6,667,917 to Templeton, *et al.* (hereinafter, "Templeton"). Dependent claims 5, 18-21 and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushige in view of either U.S. Patent No. 6,725,404 to Choudhury, *et al.* (hereinafter, "Choudhury") or U.S. Publication No. 2003/0101020 A1 to Hawkins, *et al.* (hereinafter, "Hawkins"). Based upon the above Amendments and following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

10. Claim 1, as amended, recites: "[a] margin testing system...., comprising: a fault bypass module ... configured to intercept and mask at least one signal indicative of faults associated with one or more of said components during margin testing of said electronic system. (*See*, Applicants' claim 1, above.)

11. In rejecting claim 1, the Examiner alleged that Matsushige discloses a fault bypass module that masks signals indicative of faults associated with one or more components. In support of this contention, the Examiner refers Applicants to the port bypass circuit disclosed in Matsushige. (*See*, Matsushige, page 8, paras. 143-145.) Applicants respectfully disagree.

12. Contrary to the Examiner's assertion, Matsushige's port bypass circuit does not intercept signals nor does it mask signals, as recited in Applicants' claim 1. Rather, Matsushige's port bypass circuit is part of a circuit that selects and controls whether a signal transmitted through a fiber channel line is to be input/output from/to a magnetic disk device controlled by the port bypass circuit, or whether the magnetic disk device is to be "bypassed" in the fiber channel loop. (*See*, Matsushige, pages 2-3, para. 44.) Matsushige merely discloses margin test in which signals are supplied to the magnetic disks via the port bypass circuits. (*See*, Matsushige, page 8, paras. 143-145.) Thus, there is no teaching or suggestion in Matsushige that the port bypass circuit of Matsushige "intercept and mask signals indicative of faults ..." as recited in Applicants' claim 1.

13. This interpretation of Matsushige is supported by the Examiner elsewhere in the Office Action. In rejecting claim 24, the Examiner recognized that Matsushige does not disclose masking intercepted signals indicative of faults. To overcome this recognized deficiency in Matsushige, the Examiner relied on Templeton for allegedly disclosing this claim element. (*See*, Office Action, pg. 6.) For at least these reasons, Applicants respectfully submit that Matsushige fails to disclose Applicants' invention as recited in claim 1. Withdrawal of the Section 102 rejection of claim 1 is, therefore, respectfully requested.

14. Applicants further submit that independent claim 22 is likewise allowable over the art of record. Specifically, for at least the reasons noted above, none of the references of record, taken alone or in combination, teach or suggest "a fault bypass module... configured to intercept and mask signals indicative of one or more faults associated with one or more of said components during margin testing of said electronic system" as recited in claim 22. Thus, Applicants respectfully submit that claim 22 is patentable over the art of record.

15. Dependent claims 5, 18-21 and 23 incorporate the subject matter of their respective independent claims 1 and 22 and add additional subject matter which makes them a fortiori and independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims 5, 18-21 and 23 be reconsidered and withdrawn.

16. Claim 24 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushige in view of U.S. Patent No. 6,667,917 to Templeton, *et al.* (hereinafter, "Templeton"). Applicants respectfully disagree.

17. In contrast to the Examiner's assertion, Templeton fails to disclose intercepting and masking signals indicative of faults. Rather, as discussed above, Templeton simply discloses a pass result that indicates whether there are faulty memory cells present. Specifically, Templeton discloses a circuit that determines whether any faulty or weak memory cells discovered during stress testing are repairable. In Templeton, a pass result indicates that there are no faulty or weak memory cells present. Alternatively, a pass result may indicate that faulty or weak memory cells are present but are repairable using redundant memory cells. (*See*, Templeton, col. 7, lns. 36-40.)

18. As such, Applicants respectfully submit that Templeton does not disclose "a fault bypass module ... configured to intercept and mask signals indicative of faults associated with one or more of said components during margin testing of said electronic system," as recited in claim 1. Thus, the system resulting from the combination of Matsushige and Templeton would fail to contain all the elements of Applicants' claimed invention. For this reason alone, Applicants respectfully request that the rejection of claim 24 be reconsidered and withdrawn.

19. In rejecting other dependent claims, the Examiner also relied on Choudhury and Hawkins. These references, however, do not cure, and the Examiner has not alleged that they cure, the above-noted defects of Matsushige and Templeton. Applicants, therefore, respectfully submit that for similar reasons to those discussed above, independent claim 24 is likewise allowable over the cited references for at least the reason that none of the references, whether taken alone or in combination, teach or suggest "intercepting one or more signals indicative of faults associated with one or more components of said electronic

system during margin testing thereof, and masking said intercepted signals by generating signals indicative of absence of said faults.”

20. Furthermore, the combination of Matsushige and Templeton is *prima facie* improper because the Office Action has cited no portion of Matsushige that would supply a person of ordinary skill in the art with a motivation to combine the teachings of Matsushige with the teachings of Templeton. For this reason as well, Applicants respectfully request that the rejection of claim 24 be reconsidered and withdrawn.

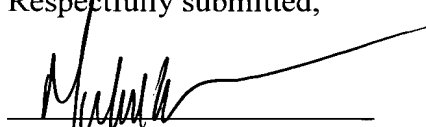
New Claims

21. Applicants have also added new claim 25-32. Applicants respectfully submit that these new claims are allowable over the art of record for reasons similar to those set out above.

Conclusion

22. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,



Michael G. Verga
Reg. No. 39,410

February 15, 2005